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UMATILLA RIVER, WALLA WALLA RIVER A 29219 and WILLOW CREEK WATERSHEDS

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WATER SUPPLY OUTLOOK BRARY

as of APRIL 1, 1956



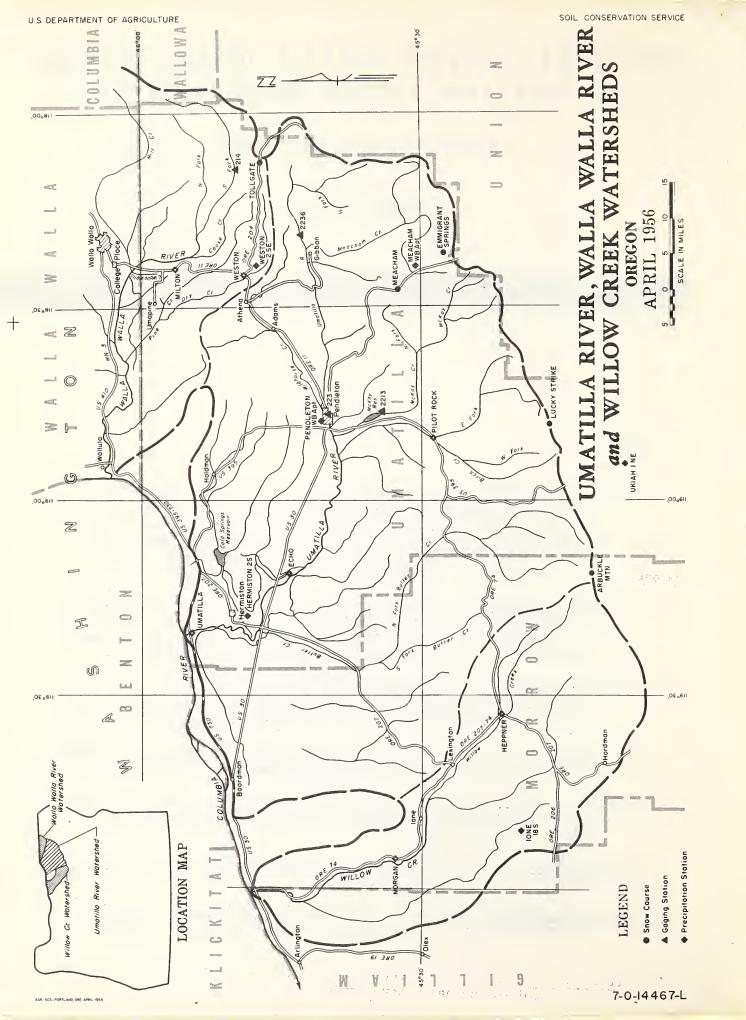
U.S.SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

- Water Supply Outlook: Good to ample water supplies for Walla Walla,

 Umatilla and Willow Creek watersheds are assured if normal snowmelt and runoff conditions prevail. Birch, Butter, Willow and
 Rhea Creeks have flowed most of the winter and will continue to
 furnish above average water supplies. Ground-water in the key
 well near Milton is only slightly below the average.
- 2 Streamflow Forecasts: Flow of the Walla Walla South Fork is forecast at 109 percent average for the April-September period. Likewise, the Umatilla at Pendleton will discharge 119 percent average and McKay Creek 108 percent average for the next six months.
- 2 Reservoir Storage: Cold Springs Reservoir is now filled to its capacity of 50,000 acre feet. McKay Reservoir, with 57,900 acre feet in storage, has been spilling to make room for inflow yet to come.
- 2 Soil Moisture: All soils in mountain watersheds are extremely wet and will cause snow-melt or rain-water to enter the streams rapidly.
- Snow-Cover: Water content of the snow averages above normal as follows:
 On the Walla Walla, 113 percent; on Umatilla, 126 percent; on
 Willow Creek, 144 percent.
- Precipitation: Fall and winter precipitation has been heavy, averaging one-third to one-half above normal.
 - Current Streamflow: Fall and winter flow (October through March) of the Umatilla River has been about one-half again above normal.



WATER SUPPLY OUTLOOK For April-September 1956a

Source of Water	Acreage Irrigate	
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Walla Walla Basin		
Mill Creek		Supplies water for City of Walla Walla. Flow will be ample and will be about 37,000 acre feet in the next six months.
North Fork Walla Walla	124	Ample water for all usual irrigation.
South Fork Walla Walla	348	Ample water for all usual irrigation.
Main Walla Walla	1,344	Ample water for all usual irrigation.
Little Walla Walla	13,700	Ample water for all rights including Hudson Bay and Plainview Ditches.
Mud Creek	373	Ample water for all usual irrigation.
Dry Creek	1,207	Ample water for all usual irrigation.
Pine Creek	759	Ample water for all usual irrigation.
Dugger Creek	595	Ample water for all usual irrigation.
Johnson Creek	110	Ample water for all usual irrigation.
Umatilla Basin		Adequate water for all usual irrigation.
Main Umatilla	12,074	Late season flow will be better sustained than average unless drought sets in.
Umatilla and Cold Springs	6,000	Ample water for all usual irrigation.
Umatilla and McKay Res.	9,693	Ample water for all usual irrigation.
McKay Creek	280	Adequate water for all usual irrigation.
Birch Creek	1,000	Adequate water for all usual irrigation.
Butter Creek	6,000	Adequate water for all usual irrigation.
Willow Creek Basin	errorden entre ettilletin ajaan men astaantinents	
Willow and Rhea Creeks	11,780	Adequate water for all usual irrigation. Excellent snow-cover on head of watershed

a - Assuming normal meteorological conditions during the April - September period.

STREAMFLOW FORECASTS^a As of April 1, 1956

-	Gaging Station		treamflow in		1956 as
No.	Name	Forecast 1956	Forecast 19 Period	yr. Avg. 1938-52	% of 15- yr. Avg.
214	Walla Walla So. Fk. nr. Milton	77.0	AprSept.	70.5	109
214	Walla Walla So. Fk. nr. Milton	63.0	AprJuly	57.8	109
2236	Umatilla R., nr. Gibbon	102.0	AprSept.	86.8	118
223	Umatilla R., at Pendleton	200,0	AprSept.	167.4	119
223	Umatilla R., at Pendleton	185.0	AprJuly	154.5	120
2213	McKay Cr., nr. Pilot Rock	30.0	AprSept.	27.8	108
2213	McKay Cr., nr. Pilot Rock	29.0	AprJuly	27.6	105

RESERVOIR STORAGE

	Usable	Thousand	a.f.	in storage	about April 1,	
Reservoir	Capacity 1000 a.f.	1956	1955	1954	15 Yr. Avg. 1938-52	1956 as % of 15 Yr. Avg.
McKay	74.0	57.9	20.2	43.9	58.9	98
Cold Springs	50.0	49.4	42.3	50.0	48.2	102
Total (2 Reservoirs)	124.0	107.3	62.5	93.9	107.1	100

SOIL MOISTURE

Soils In:	Fall Status	Current status as of April 1, 1956
Valleys (irrigated)	(soils were extre	last year, all mountain and valley mely dry. An unusual combination of
Mountains	(heavy precipitat (completely "rech (soils are now ex (ion and early winter snow-melt has arged" all watersheds so that all tremely wet.

As of April 1, 1956

-	. Snow Cours		56		Water Content (In.)			
No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	1955	1954	15 Yr. Avg. 1938-52	% of 15- yr: Avg.
100 July 2016	below 1,500'	-						
18D4	Emigrant Sprgs.	39251	20	7.0	13.3	0.4	5.8	121
18D5	Meacham	L:3001	34	13.2	19.0	3.3	8.7	152
distribution of the same of th	Average	den notes and other from the common three (1975) makes the size		10.1	16.2	1.8	7.2	140
	above 4500'	-						
19D2	Arbuckle Mtn.	54001	36	15.5	14.2	8.9	10.8	144
18D6	Lucky Strike	50501	50	18.1	14.3	11.3	13.1**	138
18D3	Tollgate	50701	73	31.6	29.9	25.3	27.9	1.13
No. do auto franco may an a-	Average			21.7	19.5	15.2	17.3	125
	verage (5 courses)			17.1	18.1	9.8	13.2	130
** Av	verage is for less, 5 yrs.	than 15	yrs. of	record in	1 19 3 8-5	2 perio	od but not les	ss than

PRECIPITATION DATA

Station							(inch			Avg.	Avg. as %
Name	Elev.	Sept.								Normal:	of Normal
Echo	601	0.73					0.94e				155
Heppner	1950	1,23					0.57				140
Hermiston 2S	624	0.52	0.88	2.21	2.07	2.52	0.79e	0.38	e1.34	0.87	154
Ione 18S	1925	0.77	1.52	2.41	2.52	3.58	1.10e	0.68	e1.80	1.24	145
Meacham WB Apt.	4050	1.52	3.38	5.53	4.89	5.59	3.55	2.28	3.82	3.70	103
Milton Freewater	1056	1.15	2.47	2.87	2.72	3.86	1.44	1.12	2.23	1.38	162
Morgan	783	0.32	0.89	2.51	2.24	2.87	0.798	0.41	e1.43	.94	152
Pendleton WB.AP	1489	1.36	2.08	2.69	1,99	2.97	0.81	0.54	1.78	1.41	126
Pilot Rock 1 SE	1640	1.08	1.75	2.96	2.04	3.06	1.04	0.97	1.84	1.24	148
Ukiah	3340	0.89					2.11				135
Umatilla	285	0.36	0.72	1.87	2.21	2.27	0.79e	0.26	1.21	0.83	146
Average		0.90	1.61	2.80	2.69	3,26	1.27	0.80	1,90	1.41	135
Avg. Normal*		0.74	1.18	1.65	1.71	1.69	1.53	1.37		on the same of the	
Avg. as % of Norm		122	136	170	157	193	83	5.8			
Fall Avg. as % of											
Normal (Sept-Oct		149									
* Based on USWB	data	e esti	mated								

